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DEMOGRAPHIC AND SOCIAL STATISTICS: 2000 WORLD POPULATION AND HOUSING CENSUS PROGRAMME

Report of the Secretary-General

Summary

This report describes the Secretariat's preparation for the 2000 World Population and Housing Census Programme and the contents of the draft revised Principles and Recommendations for Population and Housing Censuses (ST/ESA/STAT/SER.M/67/Rev.1), submitted for consideration by the Statistical Commission. First, the report describes the assistance provided to developing countries by the Secretariat and the regional commissions through their regular activities and projects funded by the United Nations Population Fund (UNFPA) (paras. 2-6). The major activity undertaken by the Secretariat was the revision of the Principles and Recommendations for Population and Housing Censuses. An Expert Group reviewed the draft document in September 1996 (paras. 7-11). The report of the Expert Group is available as a background document. The recommendations and advice of the Expert Group were adopted in the version that is before the Commission, with the exception of the items shown in paragraph 12. The remainder of the report describes the revised Principles and Recommendations, which consists of four parts: part one, "Operational aspects of population and housing censuses"; part two, "Topics for population censuses"; part three, "Topics for housing censuses"; and part four, "Census products and data utilization". The changes in part one are indicated below in paragraphs 14-20; those in part two, in paragraphs 21-29; those in part three, in paragraph 30; and those in part four, in paragraphs 31 and 32. Points for discussion by the Commission are presented in paragraph 35.

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1. At its twenty-eighth session, held in New York from 27 February to 3 March 1995, the Statistical Commission "endorsed the proposed preparations for the 2000 World Population and Housing Census Programme; approved the preparation and timely dissemination of handbooks on census methods and training materials and the preparation of the planned workshops; endorsed the convening of an expert group on the 2000 World Population and Housing Census Programme to consider, inter alia, concepts and definitions of families and households, recommendations on housing censuses, and the exploitation of census data, especially those relating to children, gender issues, migration, and impairment, disability and handicap (IDH); stressed the importance of undertaking technical cooperation activities in collaboration with the regional commissions, the specialized agencies and national statistical offices; emphasized the application of GIS/PopMap[1] techniques and facilities for disseminating provisional census data in an on-line environment".[2]

2. In response to the Statistical Commission's actions, the Secretariat convened the Expert Group meeting to review the draft revised Principles and Recommendations for Population and Housing Censuses (hereinafter referred to as Principles and Recommendations) as described in paragraphs 7-34 below. In addition, the Secretariat, together with the regional commissions, has continued to provide assistance to developing countries in conducting their censuses. For this purpose, the Secretariat maintains a post for an interregional adviser in computer methods and informatics, and the United Nations Population Fund (UNFPA) provides support for six specialist posts, located in the Statistics Division, in population statistics, data processing and geographical information systems (GIS). UNFPA also provides support to several advisers, (including those in population statistics, data processing and cartography) in the regional commissions who are attached to the UNFPA country support teams. The Secretariat has also continued to execute technical cooperation projects in population and housing censuses around the world.

3. As part of the regular activities, the Secretariat has continued to prepare handbooks in the population and housing censuses series. The Handbook of Population and Housing Censuses, part IV, Economic Activity Status, is in press; and part V, on economic characteristics of the population, is in preparation. With support from UNFPA, a Windows version of PopMap, a geographical database software package, is due for release by the end of 1996. MapScan, a software package to facilitate the compilation of geographical data from paper maps by using scanning and raster-to-vector conversion technologies, has also been produced. MapScan is a companion package of PopMap that makes computerized mapping and GIS applications more accessible.

4. Under the planned activities of the 2000 World Population and Housing Census Programme, the Secretariat submitted a proposal for funding entitled "Training on the application of new technologies in population census operations". This project, to be implemented from 1997 to 2000, is aimed at organizing a series of training workshop for participants from developing countries on the use of microcomputers in various stages of population census operations. Under the auspices of the Economic and Social Commission for Asia and the Pacific (ESCAP), UNFPA recently approved a project for the Asia and Pacific region entitled "Application of new technology in population data

collection, processing, dissemination and presentation". The two projects are expected to be complementary.

5. In March 1997 the Statistics Division, in partnership with UNFPA, will organize a workshop on strengthening population information systems for six countries in Central Asia that will conduct population and housing censuses for the first time. Furthermore, the Economic Commission for Europe (ECE), with support from the United Nations Development Programme (UNDP), is carrying out a project consisting of training workshops and advisory services to improve the capacity of the countries in transition to conduct population and housing censuses.

6. In the past the United Nations regional commissions have traditionally convened regional meetings to formulate recommendations for population and housing censuses. For the 2000 round, ECE has prepared Draft Recommendation for the 2000 Round of Population and Housing Censuses in the ECE Region. It will be considered for adoption by the Conference of European Statisticians in June 1997 and is expected to be published later in the year. The Economic Commission for Africa (ECA) convened a Working Group on Population and Housing Censuses in January 1996 and issued a report on the meeting. The other regional commissions have not yet scheduled any similar activities.

7. A major activity undertaken by the Secretariat was the preparation of the revised Principles and Recommendations. Four themes guided the process leading to the revised document: (i) changes in technology and their subsequent adoption for use in national census-taking; (ii) the increased capability of national census offices to disseminate census data in a more flexible manner, together with the increased ability of users to utilize census data stored in electronic formats; (iii) changes in socio-economic situations in many countries, particularly those pertaining to housing, economic characteristics of the population and patterns of international migration; and (iv) the increased emphasis on responding to user needs for data, which may affect the priority given to particular census topics.

8. Experts from both developed and developing countries were invited to prepare technical papers on various census topics. In total, 21 papers were received in 1995. Based on recent developments in census-taking and on the proposals of the experts, as provided in the technical papers, a team within the Statistics Division, assisted and advised by colleagues from the Population Division, drafted revisions to the existing publications. Upon its completion, the draft revised Principles and Recommendations was provided to the experts for their review.

9. An Expert Group on the 2000 World Population and Housing Census Programme was convened by the Secretariat in New York from 9 to 13 September 1996 to review the draft revised Principles and Recommendations. The deliberations of the Expert Group were exhaustive and a number of suggestions were made to improve the manuscript. The Group strongly supported most of the changes proposed by the Secretariat and recommended some refinements, clarifications and additions.

10. The Expert Group stressed the importance of maintaining the right balance between the sometimes conflicting needs for continuity and change in census operations. A new section entitled "Strategic objectives" was proposed. The Expert Group supported the inclusion of new sections on quality control and databases and expressed agreement with the revisions to the sections on data processing, dissemination and the evaluation of results. The Expert Group also proposed strengthening and simplifying the section on topics to be investigated and provided thoughtful advice on the treatment of the topics proposed.

11. The Expert Group reviewed a proposed new part (part four), which addresses the needs of users and is based on the section on specific population groups in the Supplementary Principles and Recommendations for Population and Housing Censuses. The Group recommended that a description of census products and services be added in order to serve as a link or bridge between the more technical aspects of the census and its users. They also indicated that predetermined census tabulations can provide valuable guidance in responding to users' needs; may provide a visible output to meet national needs; and may provide justification for the high cost of census-taking. These tabulations can also provide a common approach that can improve international comparability in census definitions, basic statistics and derived indicators.

12. With few exceptions, the recommendations and advice of the Expert Group have been incorporated into the draft revised Principles and Recommendations for Population and Housing Censuses (PROVISIONAL ST/ESA/STAT/SER.M/67/Rev.1), which is before the Commission for consideration. Items recommended by the Expert Group that have not been included in the revised Principles and Recommendations are: (i) the request that research be undertaken to estimate the marginal costs of adding or deleting a census question and that the new Principles and Recommendations should provide guidance in estimating the total costs of conducting a census; (ii) the request that references to advanced data-capturing methods be included in the document; and (iii) the request that the "socio-economic groups classification" would be better placed in the proposed part four of the Principles and Recommendations (Utilization of statistics from population and housing censuses), where issues relating to the development of indicators are considered.

13. The structure of the Principles and Recommendations closely follows that adopted in 1980. Modifications have been made in the contents of parts one, two and three. In addition, an entirely new section, part four, has been added to highlight the needs of users. The tabulations previously included in parts two and three are planned for inclusion in annexes to the published volume upon its adoption by the Commission. In addition, an illustrative list of census maps will be included.

14. Part one of the draft revised Principles and Recommendations (Operational aspects of population and housing censuses) includes several entirely new sections and some revisions to update sections previously adopted for the 1980 censuses. Chapter I was revised to include a section entitled "Strategic objectives", which emphasizes the importance of developing a set of strategic aims and objectives to guide the census and help determine its success (paras. 1.11-1.16). The relationship of the census of agriculture to population and housing censuses was also revised, in consultation with the Food and

Agriculture Organization of the United Nations (FAO), to take account of the 2000 World Census of Agriculture Programme (paras. 1.34-1.41).

15. To emphasize the constant need to improve the quality of census-taking and the resulting data, in chapter II, three elements were added to section A (Preparatory work): (i) "Plans for quality control and improvement programme" (paras. 1.77-1.78); (ii) "Plans for dissemination" (paras. 1.129-1.132); and (iii) "Avoiding gender biases and biases affecting data on minority populations" (paras. 1.139-1.142). Cartographic (mapping) work was extensively revised to emphasize the application of new technology (paras. 1.79-1.97), including an emphasis on the need to freeze small area boundaries during the months prior to the census.

16. A new section B (Quality control and improvement programme) (paras. 1.143-1.184) was introduced to emphasize the need to maintain and improve quality in all stages of the census operation. Section D, formerly section C, (Data processing) was extensively revised to incorporate the experience of using new technology for data capture, data editing, processing control, and production of master files and tabulations (paras. 1.199-1.228).

17. A new section on databases was also added as section E. In this section, census directors are cautioned against undertaking database projects unless there are focused user requirements. As regards GIS, the Principles and Recommendations emphasizes that GIS development is rather complex and requires technology that needs to be introduced carefully and gradually in developing countries. National statistical offices should promote cooperative arrangements with other agencies and proceed only where it is feasible to maintain the system during the intercensal years and where there is no dependence on external sources (paras. 1.229-1.255).

18. Section F (Dissemination of results) (paras. 1.256-1.278) now covers, in addition to publication of results, dissemination on computer media and on-line dissemination through the Internet. To ensure the longevity of the Principles and Recommendations, and to avoid constraint by current technology, the text describes current technology only as an example subject to further development. In this section, issues related to methods for developing census products, such as publications, computer media, and databases, are described; while other aspects, particularly those related to the contents and utilization of census products, belong in part four. The Principles and Recommendations includes these topics in both sections with appropriate cross-referencing (see paras. 4.12-4.37).

19. An extensive revision in section G (Evaluation of the results) is made to emphasize the importance of considering a post enumeration survey (PES) with clearly defined objectives. The Principles and Recommendations indicates that while every country should undertake a comprehensive evaluation of its census, the complexities and costs involved in conducting a successful PES should be carefully weighed, together with a clear statement of the objectives and the requirements for a PES, before a decision is reached to undertake one (paras. 1.279-1.300). Chapter III (Use of sampling in population and housing censuses) (paras. 1.308-1.340) has been edited, but not substantively revised, in order to eliminate duplicate coverage of topics included under PES

(paras. 1.292-1.300) and "Quality control and improvement programme" (paras. 1.143-1.184).

20. In chapter IV, a unit of enumeration, the household, has been revised. Previously both the household and the family were identified as units of enumeration. In the Principles and Recommendations, two approaches are described for the household as the unit of enumeration. One, based on housekeeping arrangements, the other on dwelling or housing units. To reflect the current practices, the definition of "household" has been revised to indicate the preference for the use of the "housekeeping" concept, while acknowledging the widespread use of the "household dwelling" concept in many countries.

21. In part two, section A (Factors determining the selection of topics) has been partially revised to emphasize that the issue of census content is clearly a matter of national choice. Among the points introduced in determining census content are the importance of meeting user needs in the most reliable and cost-effective manner and the need to build a national consensus on the subject.

22. In section B (List of topics) a simplification of the previous lists was introduced. In this section, the list shows all recommended topics, as shown previously, as a consolidated list. The items in bold in the revised draft are those that were shown as priority topics in the majority of regional recommendations during the 1980 and 1990 rounds of censuses. The remaining topics are shown in regular type (para. 2.16). The list of population census topics is set out in the annex below.

23. In section C (Definitions and specifications of topics) changes were introduced to various topics in the light of experiences from the 1980 and 1990 population censuses. The item on household and family characteristics has been strengthened and clarified. To improve the quality of information on relationship among household members, instructions for reporting the relationship to the household head are emphasized. A single individual is chosen primarily for the purpose of obtaining relationships among household members. The text continues to recognize the need, in some countries, to identify joint household heads. The importance of the relationship item is stressed. Countries are encouraged to provide these concepts and definitions in their published reports.

24. In order to develop statistics on the living arrangements of children, youth, the elderly and other selected groups, a more detailed classification of household and a new classification for family status has been proposed. Examples of types of households are provided to assist countries in developing household classifications relevant to their needs.

25. The Principles and Recommendations still recognizes the importance of the census for measuring fertility and mortality, particularly in countries where no alternative data sources exist. However, it emphasizes that many of the specialized questions are better suited to more focused demographic surveys and that strong reservations exist among experts on the extent to which adult mortality can be adequately measured in population censuses. Revisions were made to improve data quality in the following items: (i) data on "children ever

born" and "children living" should be collected by sex; (ii) "date of birth of the last child born alive" was introduced to replace "live births within the 12 months preceding the census" to measure current fertility; and (iii) "deaths in the 12 months preceding the census" was added to measure current mortality. To improve the quality of data on duration of marriage, a section on "age, date or duration of marriage" was provided to give guidance on alternative methods for collecting this information (paras. 2.118-2.142).

26. Educational characteristics have been amplified, taking into consideration the proposal by the United Nations Educational, Scientific and Cultural Organization (UNESCO) to reflect some of the issues leading to the revision of the International Standard Classification of Education (ISCED). Revisions include (i) the collection of information on literacy in more than one language, for use by countries where it was found necessary and manageable; and (ii) the use of "5 years of age" as the lower age limit for collecting information on literacy, school attendance and educational attainment. References to ISCED have been made in general terms, since the draft proposal is currently under consideration by UNESCO.

27. Economic characteristics, revised extensively in the Supplementary Principles and Recommendations for Population and Housing Censuses, issued in 1990, have been made consistent with the new System of National Accounts (SNA).[4] The revised section on economic characteristics, prepared in consultation with the International Labour Office (ILO), includes the following changes: (i) the terminology and definitions of activities within and outside the production boundary should be checked and reconciled with the 1993 SNA to ensure consistency between the national accounts and economic activity statistics; (ii) since the informal sector is a subset of the "household sector", the informal sector is discussed under the section on "institutional sector of employment"; in view of the complexity of collecting information on the informal sector, the Principles and Recommendations highlights the fact that surveys are the ideal medium for collecting such data; (iii) modifications were made to provide general guidance on the measurement of the "usually active population"; and (iv) a new section on "place of work" was introduced (paras. 2.164-2.255).

28. Based upon revisions to the Recommendations on International Migration Statistics,[5] which is also under consideration by the Statistical Commission, the section on international migration characteristics in the Principles and Recommendations was revised. In order to make the census recommendations consistent with the recommendations on international migration, it is proposed that both citizenship and country of birth are needed to measure immigrant stock (paras. 2.260-2.262).

29. Recognizing emerging needs for disability statistics, a new topic on disability characteristics is introduced for the first time. The collection of disability information is based on the "disability approach" rather than the "impairment" or the "handicap" approach to identify persons with disabilities. The Principles and Recommendations discusses the use of the census to develop a sample frame for survey purposes, since conducting a specialized disability survey is the preferred method for data collection on this topic. The text stresses that definitions of disability should be clear and that the wording of questions to identify disability should be simple. A specific question listing

the types of disability rather than a generic question is recommended (paras. 2.271-2.272).

30. Part three (Topics for housing censuses) contains revisions in: (i) the classification of housing units to clarify the differences between standard, medium-standard, marginal and temporary housing units (paras. 3.54-3.77); (ii) occupancy status, where a three-digit classification of non-seasonally vacant dwellings is introduced (paras. 3.89-3.92); and (iii) the type of ownership, where attention to employer-provided housing is given (paras. 3.93-3.97). New topics are introduced: (i) available floor space to measure overcrowding (paras.3.101-3.103); (ii) distinguishing whether facilities are for the exclusive or shared use of the occupants; and (iii) solid waste disposal for the 2000 round of population and housing censuses (para. 3.125).

31. Part four, (Census products and data utilization) is designed, in part, to serve as an introduction to users who are unfamiliar with population and housing censuses as a source to meet their needs for demographic and social statistics and, in part, to provide some of the indicators needed to monitor progress on the goals identified in the plans of action adopted by various international conferences held in the 1990s. Part four highlights attention to user needs. It indicates to users what is possible to obtain from a census and emphasizes to census organizations the importance of having user input. It serves as a link or bridge between the more technical aspects of the census and its users.

32. Chapter VII (Promotion of user-producer dialogue) emphasizes the need to promote dialogue between users and census producers to improve understanding of the use of census products as well as to obtain user input in improving the design of and access to census products and services. Chapter VIII (Census products and services) includes published results, mapping products, computer media and customized products and services. Chapter IX (Census data utilization) considers the needs of a wide range of user groups, including those who have a particular focus on gender, children and youth, the elderly or disabled persons. The chapter includes general uses of population and housing censuses, local area uses, cross-cutting social issues and social indicators. The latter section includes selected indicators from the minimum national social data sets (MNSDS) that can come from population and housing censuses.

33. If adopted by the Commission, a volume for use by countries in their 2000 population and housing censuses will be published. The Principles and Recommendations for Population and Housing Censuses is expected to be available in late 1997 in all six languages of the United Nations.

34. There still remains a need to provide guidance in the area of published tabulations. The following annexes are planned for inclusion in the published Principles and Recommendations: (i) List and uses of population census tabulations; (ii) List and uses of housing census tabulations; (iii) List of census maps; (iv) Formats of population census tabulations; (v) Formats of housing census tabulations.

Points for discussion

35. The Statistical Commission may wish to discuss the general framework of the proposed Principles and Recommendations and consider what changes, if any, are needed in the draft revised Principles and Recommendations for Population and Housing Censuses (PROVISIONAL ST/ESA/STAT/SER.M/67/Rev.1).

Notes

GIS stands for 'Geographical Information System' and PopMap is an integrated software package for geographical information, graphics and map databases.

Official Records of the Economic and Social Council, 1995, Supplement No. 8 (E/1995/28), para. 56.

Two publications are currently in use: Principles and Recommendations for Population and Housing Censuses (United Nations publication, Sales No. E.80.XVII.8) and Supplementary Principles and Recommendations for Population and Housing Censuses (United Nations publication, Sales No. E.90.XVII.9).

System of National Accounts 1993 (United Nations publication, Sales No. E.94.XVII.4).

Draft revised Recommendations on Statistics of International Migration (PROVISIONAL ST/ESA/STAT/SER.M/58/Rev.1).

Annex

LIST OF POPULATION CENSUS TOPICS[a]

Topics collected directly	Derived topics
1. Geographical and internal migration characteristics (paras. 2.18-2.59)	
(a) *Place of usual residence (paras. 2.20-2.24) and/or	(g) *Total population (paras. 2.42-2.48)
(b) *Place where present at time of census (paras. 2.25-2.28)	(h) Locality (paras. 2.49-2.51)
(c) *Place of birth (paras. 2.29-2.34)	(i) *Urban and rural (paras. 2.52-2.59)
(d) *Duration of residence (paras. 2.35-2.37)	
(e) *Place of previous residence (paras. 2.38-2.39)	
(f) *Place of residence at a specified date in the past (paras. 2.40-2.41)	
2. Household and family characteristics (paras. 2.60-2.84)	
(a) *Relationship to head or other reference member of household (paras. 2.63-2.72)	(b) *Household composition (paras. 2.73-2.83)
	(c) Household and family status (para. 2.84)
3. Demographic and social characteristics (paras. 2.85-2.117)	
(a) *Sex (para. 2.86)	
(b) *Age (paras. 2.87-2.95)	
(c) *Marital status (paras. 2.96-2.103)	
(d) *Citizenship (paras. 2.104-2.108)	
(e) Religion (paras. 2.109-2.111)	
(f) Language (paras. 2.112-2.115)	
(g) National and/or ethnic group (paras. 2.116-2.117)	

Topics collected directly	Derived topics
4. Fertility and mortality (paras. 2.118-2.142)	
(a) *Children ever born (paras. 2.124-2.129)	
(b) *Children living (paras. 2.130-2.131)	
(c) Date of birth of last child born alive (paras. 2.132-2.134)	
(d) Deaths in the past 12 months (paras. 2.135-2.136)	
(e) Maternal/paternal orphanhood (paras. 2.137-2.139)	
(f) Age, date or duration of first marriage (paras. 2.140-2.141)	
(g) Age of mother at first child born alive (para. 2.142)	
5. Educational characteristics (paras. 2.143-2.163)	
(a) *Literacy (paras. 2.144-2.148)	
(b) *School attendance (paras. 2.149-2.151)	
(c) *Educational attainment (paras. 2.152-2.157)	
(d) Field of study and educational qualifications (paras. 2.158-2.163)	
6. Economic characteristics (paras. 2.164-2.255)	
(a) *Activity status (paras. 2.167-2.207)	
(b) Time worked (paras. 2.208-2.211)	
(c) *Occupation (paras. 2.212-2.221)	
(d) *Industry (paras. 2.222-2.227)	
(e) *Status in employment (paras. 2.228-2.238)	
(f) Income (paras. 2.239-2.241)	
(g) Institutional sector of employment (paras. 2.242-2.251)	

Topics collected directly	Derived topics
(h) Place of work (paras. 2.252-2.255)	
7. International migration (paras. 2.256-2.265)	
(a) Country of birth (paras. 2.260-2.261)	
(b) *Citizenship (para. 2.262)	
(c) Year of arrival (paras. 2.263-2.265)	
8. Disability (paras. 2.266-2.285)	
(a) Disability (paras. 2.270-2.280)	
(b) Impairment and handicap (paras. 2.281-2.284)	
(c) Causes of disability (para. 2.285)	

[a] Items preceded by an asterisk (*) are indicated in bold in the draft revised Principles and Recommendations for Population and Housing Censuses (PROVISIONAL ST/ESA/STAT/SER.67/Rev.1).